

CLAIM AMENDMENTS

Claim 1 (currently amended):

An up-cut chop saw, comprising:

a frame having:

a work surface supported by the frame and adapted to support a workpiece;

a rotatable blade configured to cut workpieces by moving from below the work surface of the frame to at least partially above the work surface of the frame, where the blade is electrically isolated so that it may carry an electric signal;

at least one motor configured to drive the blade;

at least one actuating mechanism operable to move the blade upward at least partially above the surface of the frame;

a detection system ~~configured to detect one or more dangerous conditions between a user and the blade~~ adapted to impart an electric signal to the blade, to monitor the signal for a predetermined change in at least one property of the signal, and to interpret any such predetermined change as accidental contact between the user and the blade; and

a reaction system configured to ~~stop the upward motion of~~ retract the blade below the work surface upon detection of a ~~dangerous condition such~~ contact by the detection system.

Claims 2-8 (withdrawn).

Claim 9 (currently amended):

The saw of claim 1, where the actuating mechanism is further operable to lower the blade below the work surface ~~of the frame~~ after the blade has been moved at least partially above the work surface ~~of the frame~~, and where the reaction system is configured to operate the actuating mechanism to lower the blade upon detection of ~~a dangerous condition~~ such contact by the detection system.

Claim 10 (original):

The saw of claim 9, where the actuating mechanism includes at least one fluid-actuated cylinder operable to raise and lower the blade.

Claim 11 (currently amended):

The saw of claim 9, further comprising at least one brace member coupled to move upward with the blade, and where the reaction system includes a brake mechanism configured to engage the brace member and stop the upward motion of the blade upon detection of ~~a dangerous condition~~ such contact by the detection system.

Claim 12 (currently amended):

C The saw of claim 1, further comprising at least one brace member coupled to move upward with the blade, and where the reaction system includes a brake mechanism configured to engage the brace member and stop the upward motion of the blade upon detection of ~~a dangerous condition~~ such contact by the detection system.

Claim 13 (withdrawn).

Claim 14 (currently amended):

The saw of claim 1, further comprising a rotatable spindle, where the blade is mounted on the spindle, and where the spindle is and blade are electrically insulated from the frame.

Claim 15 (currently amended):

An up-cut chop saw, comprising:

- a frame having an upper surface configured to support a workpiece;
- a rotatable spindle;
- a circular blade mounted on the spindle;
- an actuating mechanism configured to move the spindle upward to raise the blade at least partially above the upper surface;
- a detection system configured to detect accidental contact between a user and the blade; and
- a reaction system configured to ~~stop upward movement of~~ retract the spindle and blade upon detection of contact between a user and the blade by the detection system.

Claim 16 (original):

The saw of claim 15, where the actuating mechanism includes a pneumatic cylinder.

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Claim 17 (original):

The saw of claim 16, further comprising a control system configured to operate the pneumatic cylinder, and where the control system is configured to operate the pneumatic cylinder to move the spindle downward upon detection of contact between a user and the blade by the detection system.

Claim 18 (original):

The saw of claim 15, where the actuating mechanism includes a hydraulic cylinder.

Claim 19 (original):

The saw of claim 18, further comprising a control system configured to operate the pneumatic cylinder, and where the control system is configured to operate the pneumatic cylinder to move the spindle downward upon detection of contact between a user and the blade by the detection system.

Claims 20-22 (withdrawn).

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Claim 23 (currently amended):

A woodworking machine having a frame and operative structure that includes a circular blade, where the operative structure is controllable to move the blade upward at least partially through the frame, the machine comprising:

means for detecting accidental contact between a user and the blade;

and

means for ~~stopping upward movement of~~ retracting the blade upon detection of such accidental contact between a user and the blade.

Claim 24 (withdrawn).

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concluded